



Baranians **P** E. W. 1838

D. 3049 - 87-3-20

H. 426 - 87-4-20

May 12 - 247

Act No

Hy 4261

Dr 3949

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No.

3949

Date

May 21<sup>st</sup>

Tanner

Machine.

Reel.

Turns

57

Cor. +

2

Depth

59 fms

Shot or lead

26 lbs.

Bottom

wh. S. bk. Sh.

Bottom temperature

69.7°

No. of thermometer

98234

Cor.

-0.2

Corrected temperature

69.5

Air

76

Surface

75

Drift

N 48° E,  
9/10'

Trawl or dredge

Oyster

## SOUNDING WIRE

DOWN.

UP.

TURNS.

## DREDGE ROPE.

DOWN.

UP.

9-05.25

07=

0

9.13<sup>00</sup>35<sup>00</sup>

06.10

06.20

57.10

16.40

30.10

Marks end of

130

22.40

9-28<sup>20</sup>

Sta 15

3948.

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

Surface Net

Laipan Light, S 35° E., 7 7/10'

61C  
 2100  
 2100

2500  
 2600  
 2700  
 2800  
 2900  
 3000  
 3100  
 3200  
 3300  
 3400  
 3500  
 3600  
 3700  
 3800  
 3900  
 4000

496  
 57  
 439

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Oyster dredge = 3 hydroids; 1 antipatharian coral.			
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

Overcast, smooth sea  
 Light breeze N. E. x E.

*Antichlorine*  
No. *5* 3950 Date *May 21<sup>st</sup> 02.*

*Tanner* Machine. — Reel.

Turns *146* Cor. + *6* Depth *152 fms*

Shot or lead *26 lbs.*

Bottom

Bottom temperature

No. of thermometer *98234* Cor.

Corrected temperature

Air *76* Surface *75* Drift *15/10'*

Trawl or dredge *11' Tanner*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>9-35.50</i>	<i>40.50</i>	0	<i>9-44.10</i>	<i>39.50</i>
<i>37.05</i>	<i>39.35</i>	100	<i>48.30</i>	<i>35.15</i>
<i>37.35</i>	<i>9-38.35</i>	<i>146</i>	<i>51.30</i>	<i>31.10</i>
Marked end of		200	<i>53.05</i>	<i>26.30</i>
<i>Sta 15</i>	<i>39.35</i>	250	<i>10.01.10</i>	
		300	<del><i>11.30</i></del>	<i>10-23.40</i>
		350		
		400		
		450		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

more likely the stray line, which was old, parted

Laysan Is Light, S 19° E., 8.

OK  
H.P.  
H.P.

496  
146  
350

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Tanner Trawl =	1 small manida.		
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

Lost half of stay line,  
26 ft lead and  
Thermometer # 98234. The  
line was 20 fms from  
the bottom and was  
probably bitten off by  
a shark. !!!

No. *3951* Date *May 21<sup>st</sup> '02.*  
*Sigsbee* Machine. #1 Reel. *Navy*  
 Turns *299* Cor. + *30* Depth *329 fms*  
 Shot or lead *36 lbs*  
 Bottom *co. R.*

Bottom temperature

*46.9°*

No. of thermometer

*92442* Cor.

Corrected temperature

Air

*76*

Surface

*75*

Drift

*(833° E  
2 1/10')*

Trawl or dredge

*11' Tanner*

## SOUNDING WIRE.

DOWN.

UP.

TURNS.

## DREDGE ROPE.

DOWN.

UP.

<i>10-42<sup>00</sup></i>	<i>49.30</i>	0	<i>10-53.30</i>	<i>12.40.00</i>
<i>43.10</i>	<i>48.25</i>	100	<i>58.10</i>	<i>35.20</i>
<i>44.10</i>	<i>47.20</i>	200	<i>11-01.40</i>	<i>31.40</i>
<i>45.10</i>	<i>46.10</i>	<i>299</i>	<i>05<sup>00</sup></i>	<i>27.30</i>
		<del>300</del>	<i>08.10</i>	<i>21.20</i>
		400	<i>11.15</i>	<i>15.05-10</i>
		500	<i>12.10</i>	<i>11.55-10</i>
		<i>525</i>	<i>19.10</i>	<i>45.55</i>
		<del>600</del>	<i>27.10</i>	<i>11-39.10</i>
		<del>700</del>		
		<i>645</i>		
		<del>800</del>		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		



Laysan Is Light,  $8^{\circ}E$ ,  $7\frac{8}{10}$ !

61C  
500  
2

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

299  
30  
329

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100	Tanner Trawl lat.			
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

While towing in at 600  
fms a shoal of water  
600 ft registered in ac-  
cumulation  
Lost trawl frame net  
60 ft shot and "glass float"

*Stainer*  
 No. *3952* Date *21 May '02*  
*Sigsbee* Machine. Reel. *150*  
 Turns *319* Cor. + *32* Depth *351 fms*  
 Shot or lead *36 #2*  
 Bottom *WR. S. G.*  
 Bottom temperature *45.2*  
 No. of thermometer *92442* Cor.  
 Corrected temperature  
 Air *77* Surface *77* Drift *5.8° E. 9/10'*  
 Trawl or dredge *5 1/2 Blake with apam*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>12.43.40</i>	<i>12.52.20</i>	0	<i>1.00.00</i>	<i>07.00</i>
<i>44.40</i>	<i>51.10</i>	100	<i>03.20</i>	<i>03.00</i>
<i>45.40</i>	<i>50.00</i>	200	<i>06.00</i>	<i>59.00</i>
<i>46.40</i>	<i>49.00</i>	300	<i>09.10</i>	<i>58.00</i>
<i>47.00</i>	<i>48.30</i>	<i>319</i>	<i>13.20</i>	<i>00.00</i>
		500	<i>17.40</i>	<i>21.00</i>
		600	<i>22.00</i>	<i>17.30</i>
		<i>620</i>	<i>24.00</i>	<i>1.26.00</i>
		700		
		800		
		900	<i>5 min on bottom</i>	
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Leaper's Light 6117 H. 6117

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

319  
322  
351

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50	Blake trawl =			
100	3 kinds fishes. 2 kinds shrimp;			
200	1 munida; 1 simple coral; fragment			
300	of sponge; 1 clypeactrid; 1 pteropod			
400	shell; coralline nodules.			
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 2153 Date 21 May 02

Machine.

Reel.

Turns 310 Cor. +

Depth 347

Shot or lead 26

Bottom W. S. G. cor

Bottom temperature

No. of thermometer 1142

Cor.

Corrected temperature 17.5

Air 77

Surface 76

Drift

Trawl or dredge

## SOUNDING WIRE.

## DREDGE ROPE.

DOWN.

UP.

TURNS.

DOWN.

UP.

210.00

17.11

0

10.00

16.00

100

11.00

16.50

200

12.00

17.40

300

13.00

18.30

400

14.00

19.20

500

15.00

20.10

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

DOWN.

UP.

210.00

17.11

10.00

16.00

11.00

16.50

12.00

17.40

13.00

18.30

14.00

19.20

15.00

20.10

16.00

21.00

17.00

21.50

18.00

22.40

19.00

23.30

20.00

24.20

21.00

25.10

22.00

26.00

23.00

26.50

24.00

27.40

25.00

28.30

26.00

29.20

27.00

30.10

28.00

31.00

29.00

31.50

30.00

32.40

31.00

33.30

32.00

34.20

33.00

35.10

Laysan Light, 11-11-77

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

315  
322  
347

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Blake trawl: 1 blue prawn; 1 small prawn; 1 munida; algæ.			
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

10 ... 0  
... ..  
... ..  
... ..

No. 1361

Date

Machine.

Reel.

Turns 40 Cor. +

Depth

Shot or lead

Bottom

Bottom temperature

No. of thermometer

Cor.

Corrected temperature

Air

Surface

Drift

Trawl or dredge

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN.

UP.

3:27	3:41.55	0
26.00	40.50	100
26.10	39.20	200
28.40	38.10	300
		400
		500
		600
		700
		800
		900
		1000
		1100
		1200
		1300
		1400
		1500
		1600
		1700
		1800
		1900
		2000
		2100
		2200
		2300
		2400

Lupard Light, 11. 3

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *2000*Date *21 May 22*

Tanner Machine.

Reel: —

Turns *27* Cor. +Depth *30 fms.*Shot or lead *35 lbs.*Bottom *wh. S. B. R.*Bottom temperature *73°*No. of thermometer *92442* Cor.

Corrected temperature

Air *77.*Surface *75.*Drift *825.76*  
*3/10'*Trawl or dredge *Oyster dredge*

## SOUNDING WIRE.

DOWN.

UP.

TURNS.

## DREDGE ROPE.

DOWN.

UP.

<i>4.10.20</i>	<i>4.11.20</i>	0	<i>4.20.40</i>	<i>4.18.20</i>
<i>7.10.30</i>	<i>4.11.00</i>	<del>100</del>	<i>4.21.10</i>	<i>4.19.10</i>
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		



Payson's Light, 2.11.18.18.

OK  
3100

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50	Oyster dredge: Coral rock with corallines, bryozoa, algae, 2 brachyuran, 1 pistol crab.			
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *13955* Date *21 Mar '08*

*W. Vanner* Machine. Reel. *-*

Turns *19* Cor. + *1* Depth *20 fms*

~~Shot or lead~~ *36 lbs*

Bottom *co. R. Scummed.*

Bottom temperature *74. -*

No. of thermometer *92442* Cor. *-*

Corrected temperature

Air *77.* Surface *75.* Drift *{ 87° 08' 6/10'*

Trawl or dredge *Trawl*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>4.00</i>		0		
		100		
		200		
		300	<i>15 min</i>	
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Lupen Light, S 12° 30' N., 6 1/10'.

OK  
1000

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Gauges = 6 kinds brachyuran; 1 hermit; 1 pistol crab; 2 urchins; 1 shrimp; 2 kinds hydroids; much algae; bryozoa; corallines; branching corals; 1 worm.			
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *Hy 4262*. Date *21 Nov*

Tanner Machine. - Reel. -

Turns *29* Cor. + *11* Depth *3*~~Shot or lead~~ *36 lbs.*Bottom *co. R.*Bottom temperature *74.*No. of thermometer *92442* Cor.

Corrected temperature

Air *72.* Surface *75.* Drift

Trawl or dredge

## SOUNDING WIRE.

DOWN.

UP.

TURNS.

## DREDGE ROPE.

DOWN.

UP.

0

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

*Wrecked end of**Dr. 39.5.*

Lupard Light, S 19° N., 6 1/2'

30  
50  
100  
150  
200  
250  
300  
350  
400  
450  
500  
550  
600  
650  
700  
750  
800  
850  
900  
950  
1000

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

*Handwritten notes:*  
No. 4263  
Date 7 May 22

No. *4263* Date *7 May 22*  
*Machine.* . *Reel.*

Turns Cor. + Depth *10 1/4 fms*

~~Shot or lead~~ *9 lbs.*

Bottom

Bottom temperature } *none*

No. of thermometer Cor.

Corrected temperature

Air *79* Surface *76* Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>on W</i> <i>703</i>		0		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Payson Light, 2600 E. 1.

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

Drumming 4263 - 4264  
10 1/2. 40. 5. 10 1/2. 11. 10. 9 1/2. 10. 2.  
11 12 3/4. 14 1/2. 12 3/4.

No.

Date

May 22<sup>nd</sup> '02.

Machine.

Reel.

Turns

Cor. +

Depth

Shot or lead

Bottom

Bottom temperature

No. of thermometer

Corrected temperature

Air

Surface

Drift

Trawl or dredge

## SOUNDING WIRE.

DOWN.

UP.

## TURNS.

## DREDGE ROPE.

DOWN.

UP.

0

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400



Station 3740E., 1<sup>2</sup>/<sub>10</sub>'

11  
6.1  
11.2

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 44 4365 Date May 22, 1902

Tanner Machine. Reel.

Turns 15 Cor. + 1 Depth 16 fms

Shot or lead 26 lbs.

Bottom Co. R.

Bottom temperature 75°

No. of thermometer 92442 Cor.

Corrected temperature

Air 79 Surface 76 Drift

Trawl or dredge

## SOUNDING WIRE.

DOWN.

UP.

## TURNS.

## DREDGE ROPE.

DOWN.

UP.

7-26-45

27-50

0

27-

27-15

15

400

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

Laysan Light S 79° E, 2 1/10

OK  
70  
3.5

496  
15  
481

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

Cast No. 27.4

No. 4566

Date May 22<sup>nd</sup> 1902.

Tanner Machine. — Reel.

Turns 19 Cor. + 1

Depth 20 fms

Shot or lead 26 lbs

Bottom crs. br. S.

Bottom temperature

No. of thermometer

Corrected temperature

— run — Cor.

Air

79

Surface

76

Drift

Trawl or dredge

## SOUNDING WIRE.

## DREDGE ROPE.

DOWN.

UP.

TURNS.

DOWN.

UP.

7-42.20

43.05

0

42.35

42.40

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

Layman's Light. S 83° E. 3<sup>5</sup>/<sub>10</sub>

610  
H. H.  
H. H.

496  
19  
—  
477

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

Oct 29 1894

Station

No. 44 H267 Date May 22-02

Machine. / Reel. No. 4

Turns 0 Cor. + 2 Depth 22 fms.

Shot or lead 36 lbs.

Bottom gy. S. M. Sh. Cor.

Bottom temperature 73.2

No. of thermometer 12442 Cor.

Corrected temperature

Air 80 Surface 76 Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
		0		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Layard Light, 88800, 6 1/10'

OK  
88800  
6 1/10'

70  
22

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 4268 Date

Machine Reel.

Turns 64 Cor. + Depth

Shot or lead 26

Bottom Gas. Wh. S.

Bottom temperature

No. of thermometer 42442 Cor.

Corrected temperature

Air 60 Surface 76 Drift

Trawl or dredge

SOUNDING WIRE.

DREDGE ROPE.

DOWN.

UP.

TURNS.

DOWN.

UP.

0

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400



Layson Light. S 84° E, 7<sup>5</sup>/<sub>10</sub>

0 18. 15. 12.

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 3956

Date

Machine

Reel

Turns 123 Cor. +

Depth 125

Shot or lead

Bottom

Bottom temperature

No. of thermometer 924

Cor.

Corrected temperature

Air 80

Surface 76

Drift

Trawl or dredge

## SOUNDING WIRE.

## DREDGE ROPE.

DOWN.

UP.

TURNS.

DOWN.

UP.

0

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

Lupen Light, East,  $7\frac{9}{10}'$ .

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

123  
12  
105

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Tanner bowl lost.			
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *1925*

Date *July 1 1891*

Machine *1*

Reel *1*

Turns *5*

Cor. +

*9*

Depth

*96 fms*

Shot or lead

Bottom *Gr. M. S.*

Bottom temperature *64.5*

No. of thermometer *92442*

Cor.

Corrected temperature

Air *81*

Surface *76*

Drift

Trawl or dredge

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN.

UP.

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

Lupano Light, S 94° E, 9.

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No.

Date

Machine.

Reel.

Turns 200 Cor. +

Depth 220

Shot or lead 36

Bottom

Bottom temperature

No. of thermometer

Cor.

Corrected temperature

Air

Surface

Drift

Trawl or dredge

## SOUNDING WIRE.

DOWN.

UP.

## TURNS.

## DREDGE ROPE.

DOWN.

UP.

0

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

Longitude Light, 887° E., 8<sup>2</sup>/<sub>10</sub>!

Obs.  
H. in

200  
20  
220

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Tanner trawl:			
50	35 sea urchins of 1 sp.; 11 peristedion;			
100	4 starfish; 2 hypsicometes ? sp;			
200	1 platophyrus, sp. ? dextral; 3 do narrow			
300	sinistral; 2 do wide sinistral; 1 very small			
400	sinistral; 1 small scorpænoid; 2 trigloids;			
500	2 kinds <sup>(3)</sup> compound ascidians; 1 sea			
600	anemone; 1 brachyuran; 1 anomuran with			
700	anemone; 1 pennatulid; 2 munida			
800				
900				
1000				

REMARKS:

No. 3

Date

Machine

Reel

Turns 157

Cor. +

16

Depth

173

Shot or lead

36

Bottom

60s. W.R.

Bottom temperature

No. of thermometer

92442

Cor.

Corrected temperature

Air

Surface

Drift

Trawl or dredge

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN.

UP.

11.02.10 11.04.40

02.30 11.05.00

0

11.13.50

12.14.30

100

12.00

10.00

200

16.15

300

12.05

13.01.45

400

12.10

57.25

500

11.52.25

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400



Longwood Light.  $87^{\circ}30'E$ ,  $8\frac{2}{10}!$

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

157  
116  
177

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Tanner Trawl: 1 large prawn, 1 antigonid; 1 platypharys; 1 hypsiometes; 1 alga; 1 maioid crab.			
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *H. 425*. Date *July 1, 1881*  
*Machine.* *Reel.*  
 Turns *165* Cor. + *17* Depth *182*  
 Shot or lead *26*  
 Bottom *fine wh S. Gk Sh.*  
 Bottom temperature *57.5*  
 No. of thermometer *92442* Cor.  
 Corrected temperature  
 Air *79.* - Surface *76.* - Drift  
 Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>12. 15.20</i>	<i>12.20.10</i>	0		
<i>18.20</i>	<i>21.10</i>	100		
<i>12. 19. 0</i>	<i>12.20.20</i>	<del>165</del> <del>200</del>		
		300		
		400		
<i>also marked</i>		500		
<i>at</i>		600		
<i>Sec. 3958.</i>		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Laysan Light, S 84° E, 8 <sup>4</sup>/<sub>10</sub> '.

OK  
11/2

165  
172  
182

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No.  $\Delta$  1-3277 Date 22 May 60.

Machine. — Reel. +

Turns — Cor. +

Depth 10 fms.

Shot or lead

Bottom wh S, Co.

Bottom temperature

No. of thermometer

Cor.

Corrected temperature

Air 80 - Surface 80 - Drift 10'

Trawl or dredge 6 (Trawl used on trawl)

## SOUNDING WIRE.

DOWN.

UP.

TURNS.

## DREDGE ROPE.

DOWN.

UP.

1-45

1-46

0

1.15.00

1.20.20

50

1.15.00

1.20.20

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

No. Sounding wire broken immediately  
 after the dredge. Dredge on the  
 inside unchanged.

Laysan Light, N 75° E., 1 2/10'

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Tangles : Pistol crab; 5 kinds brachyuran crabs; 3 kinds sea urchins; branching coral; corallines; bryozoa; algæ of several kinds.			
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *Dr. 3960* Date *22 May '03.**Hand* Machine. Reel.Turns — Cor. + — Depth *10 fms.*Shot or lead *9 lbs.*Bottom *S. Co. Gln V*

Bottom temperature

No. of thermometer *4 None* Cor.

Corrected temperature

Air *81.* - Surface *76.* - Drift *1 1/10'*Trawl or dredge *6 Tangle Buoys on line*

## SOUNDING WIRE.

DOWN.

UP.

TURNS.

## DREDGE ROPE.

DOWN.

UP.

*2. 18. 15*

0

*2. 18. 20**2. 31. 30**30*~~100~~*2. 20. 20**2. 35. 20*

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

Laysan Is. Light, N 67° E., 1910'

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Tangles:			
50	Branching red corallines; many			
100	kinds crabs; 2 kinds ophiurans;			
200	1 starfish; 1 urchin; pistol crabs;			
300	1 nudibranch; 2 annelids; several			
400	kinds algae.			
500				
600				
700				
800				
900				
1000				

REMARKS:

No.

127

Date

22 May '02.

Machine.

Reel.

Turns

Cor. +

1/ Depth

19 fms.

~~Shot or lead~~

Bottom

Bottom temperature

No. of thermometer

None

Cor.

Corrected temperature

Air

81.

- Surface

76.

- Drift

Trawl or dredge

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN.

UP.

1.16.30

0

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

All. 11.16.30

960.



Laysan Is. Light, 11682, 23/11

Ok.  
get in.

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

P.L. = 40.7

No. *3961* Date *27 May 1911*

*Hand* Machine. Reel.

Turns — Cor. + Depth *78 3/4 fms.*

Shot or lead *9 lbs.* *19 fms.*

Bottom *S. Co. Sh. R.*

Bottom temperature

No. of thermometer *None* Cor.

Corrected temperature *(858° W.)*

Air *81.* — Surface *76.* — Drift *8/10'*

Trawl or dredge *Ship's Dredge*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>2.48.30</i>		0	<i>2.52.10</i>	<i>3.11.15</i>
		50	<i>2.55.00</i>	<i>3.08.30</i>
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

*Net and cross frame wrecked; net lost.*

Laysan Light 11-2-5, 5-10'

O/C  
H.C.  
J.H.

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Ship dredge - wrecked - 2 kinds algae; black. hydroid.			
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *4272* Date *20 May*  
*Hand* Machine. Reel.

Turns — Cor. + — Depth *15 1/2 fms.*

Shot or lead *9 Lbs.*

Bottom *S. Co.*

Bottom temperature

No. of thermometer *None* Cor.

Corrected temperature

Air *75* - Surface *77* - Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>3.11.15</i>		0		
		100		
<i>Thick mud</i>		200		
		300		
<i>96'</i>		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Layman's Light, 11° 2' N. 97° 12' W.

oil  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 1000 Date 22 May 02.

Machine. Reel.

Turns — Cor. + Depth 6 fms.

Shot or lead 9 Lbs.

Bottom Wh. S. Co.

Bottom temperature

No. of thermometer

Cor.

Corrected temperature

Air 75. — Surface

Drift

Trawl or dredge

## SOUNDING WIRE.

DOWN.

UP.

TURNS.

## DREDGE ROPE.

DOWN.

UP.

0

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

3. 25. 15

31. 50

49. 12

04. 25

4. 20. 30

3. 56. 40

Laysan Light. 11. 5. 05. 576'

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Tangles.			
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

many species crabs, alpheid, scorpion; solitary coral; black hydroids; clypeastrids; 2 kinds ophiurans; 2 kinds urchins; 1 gastropod; 1 annelid; large pieces branching coral.

REMARKS:

*Hydrog*

No. *3963* Date *22 Nov 02*  
 Machine. — Reel. —  
 Turns *359* Cor. + *10* Depth *319* m.  
 Shot or lead *25 lbs.*  
 Bottom *mk. d. gy. s. bk.*  
 Bottom temperature *73.70*  
 No. of thermometer *72442* Cor. —  
 Corrected temperature —  
 Air *71* Surface *75* Drift *1 mi.*  
 Trawl or dredge *Anglo-American*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>4.06.50</i>	<i>17.50</i>	0	<i>4.26.30</i>	<i>47.30</i>
<i>08.05</i>	<i>17.45</i>	100	<i>31.05</i>	<i>47.45</i>
<i>09.15</i>	<i>17.40</i>	200	<i>34.40</i>	<i>48.00</i>
<i>10.25</i>	<i>11.55</i>	245	<i>35.15</i>	<i>48.15</i>
<i>10.30</i>	<i>11.40</i>	300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		



Laysan Light 11-10-11

*Chlorophyll*  
*11-10-11*

496  
309  
187

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

Tangles:  
1 crab; many black hydroids;  
3 kinds bryozoa; 1 starfish;  
1 ophiuran, 2 antedon;  
1 parophrys; 1 corpaena;  
1 antipatharian.

REMARKS:

No. *3964*Date *May 22 1903*Machine. *Tanner*

Reel.

Turns *42* Cor. + *2*Depth *44 fms*Shot or lead *26 lbs.*Bottom *fm wh. S. brk Sh. R*

Bottom temperature

No. of thermometer

Cor.

Corrected temperature

Air *76*Surface *76*Drift *NW*Trawl or dredge *Agar Dredge*

## SOUNDING WIRE.

DOWN.

UP.

TURNS

## DREDGE ROPE.

DOWN.

UP.

*4-53.20**54.50**54.05**54.15*

0

*4-58.00*

100

*5-00.20*

200

*03.05**08.30*

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

Lupand Light, 2159 E., 6.

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
496	3800	
42	3900	
454	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100	Oyster dredge - lost.			
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

Under 4000 lbs strain  
 record to 115 fms.  
 The two lots in accumulator bucket  
 carried away - were jumped  
 out of gun block  
 Lost Oyster Dredge.

No. 412 Date 1902

Machine. Reel.

Turns Cor. + Depth

Shot or lead

Bottom S. Co.

Bottom temperature

No. of thermometer Cor.

Corrected temperature

Air 76. - Surface 75. - Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
		0		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Laysan Is Light. S 73° 30' E, 1

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

12-13-14-15-16-17.  
16-17-18.

No.

Date

23 July 1902

Tanner Machine. - Reel. -

Turns 20 Cor. + 1

Depth 21 fms

Shot or lead 26 lbs.

Bottom

Bottom temperature

74.2

No. of thermometer 92442. Cor.

Corrected temperature

Air 76. - Surface 75. - Drift

Trawl or dredge

## SOUNDING WIRE.

DOWN.

UP.

## TURNS.

## DREDGE ROPE.

DOWN.

UP.

7.2.10

7.54.00

0

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

Seapond Light, 87° E, 3 1/10'

OK  
HOSN.  
- 2

496  
20  
516

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
12	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

P.L. = 44.9

No.

Date

Machine. — Reel.

Turns 18 Cor. + 1

Depth 19 fms.

Shot or lead 26 Lbs.

Bottom m. co. R.

Bottom temperature 75.3

No. of thermometer 92442. Cor.

Corrected temperature

Air 76. — Surface 75. — Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
S. C. V. 30		0		
		18		
		<del>100</del>		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		



Laysan Is. Sept. 24 1870 30' E, 4' 10

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *1111* Date *23 May 1881*

Tanner Machine. - Reel. -

Turns *15* Cor. + *1* Depth *16 fms.*Shot or lead *26 Lbs.*Bottom *co. R. crs S.*

Bottom temperature

No. of thermometer } *None* Cor.

Corrected temperature

Air *76.* - Surface *75.* - Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>8.17.00</i>		0		
		<i>15</i>		
		<del>100</del>		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Laysan Is. Light., N 181° E., 4 1/10.

16  
10/10/10

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *4277*. Date *Dec 22 1902**Tanner* Machine. — Reel. *7*Turns *16* Cor. + *1* Depth *17*Shot or lead *26 lbs.*Bottom *co R.*

Bottom temperature

No. of thermometer *7000* Cor.

Corrected temperature

Air *76.* — Surface *75.* — Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
		0		
		16		
		<del>100</del>		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Laysan Is Light N 78° E., S  $\frac{5}{10}$ '

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

496

12

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *1477* Date *22 Nov 1881**Tanner* Machine. Reel. *-*Turns *54* Cor. + *2* Depth *56 fms.*Shot or lead *26 lbs.*Bottom *fine wh. S.*

Bottom temperature

No. of thermometer *None.* Cor.

Corrected temperature

Air *76.* - Surface *75.* - Drift

Trawl or dredge

## SOUNDING WIRE.

## DREDGE ROPE.

DOWN.	UP.	TURNS.	DOWN.	UP.
<i>8.38.55</i>		0		
		<i>51</i>		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Temperature 25.4, N 74° E, 6 5/10.

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

507. 11/17

P.L. = 50.0

No. 42-11 Date 22 Nov 1902

Machine. Reel. 1000

Turns 61 Cor. + 6 Depth 67

Shot or lead 36 Lbs.

Bottom Co. R.

Bottom temperature 70. -

No. of thermometer 92442. Cor.

Corrected temperature

Air 78 - Surface 75 - Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
10.55	12.30	0		
11.20	12.00	61		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		



Depth 882° 30' E., 7<sup>2</sup>/<sub>10</sub>'

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 3255 Date 2/27/1901

Machine. Reel.

Turns 1311 Cor. + 13 Depth 1424 fms.

Shot or lead 36 Lbs.

Bottom co. S.

Bottom temperature 63. -

No. of thermometer 92442 Cor.

Corrected temperature

Air 78. - Surface 78. - Drift } N 20° E  
1 1/10'

Trawl or dredge 8' Dredge with 8' beam trawl

## SOUNDING WIRE.

DOWN.

UP.

TURNS.

## DREDGE ROPE.

DOWN.

UP.

9. 18. 10	6. 52. 45	0	9. 18. 10	0. 20. 10
29. 10	6. 50. 30	100		
9. 30. 10	6. 48. 15	200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

August 27, 1881. 83° E., 8' 10'.

OK  
3000

134  
13  
14

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Tanner Trawl.			
50				
100				
200				
300				
400	1 mallophsio spinger; 1 trigloid; 1 ostracium sp?; 3 kinds hydroids; 2 maoid crabs; fragment of perina; 1 shrimp.			
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *Dr. 3966*. Date *23 May 02*.

Machine. Reel.

Turns *105* Cor. + *11* Depth *116*.~~Shot or lead~~ *36 lbs.*Bottom *crs co S.*

Bottom temperature

No. of thermometer *9242* Cor.

Corrected temperature

Air *76*. Surface *75*. Drift *N 56° E 10'*Trawl or dredge *8' Tanner*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>10.24.30</i>	<i>10.27.00</i>	0	<i>10.24.30</i>	<i>11.12.20</i>
<i>10.25.00</i>	<i>10.25.00</i>	<del>100</del>		<i>08.00</i>
		200		<i>11.04.00</i>
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

August 5th 1904 S 73° E., 7<sup>9</sup>/<sub>10</sub> '.

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
105	3700	
111	3800	
116	3900	
	4000	

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	<p>Tanner Trawl:</p> <p>little evidence of having been on bottom; if at all, but a very few moments.</p> <p>1? hypsicomeres sp?</p> <p>Salpa and stenophore.</p>			
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *10-395* Date *23 May '02*

Machine. *Sigsbee* Reel. *1*

Turns *152* Cor. + *15* Depth *168 fms*

Shot or lead *36 lbs.*

Bottom *crs. co. S. bk. sh. R.*

Bottom temperature *58.5*

No. of thermometer *92442* Cor.

Corrected temperature

Air *76.1* Surface *75.1* Drift *N 20 W 1 1/10'*

Trawl or dredge *8' Tanner with*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>11.15.00</i>	<i>11.20.40</i>	0	<i>11.23.50</i>	<i>12-41 =</i>
<i>15.00</i>	<i>19.30</i>	100	<i>25.20</i>	<i>37.10</i>
<i>17.40</i>	<i>17.16.50</i>	200	<i>31.20</i>	<i>32.15</i>
		300	<i>37.40</i>	<i>28.05</i>
		400	<i>43.10</i>	<i>24.40</i>
		500	<i>49.00</i>	<i>20.30</i>
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

871° E., 8 7/10'

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Tanner Trawl = 1 small stone with hydroids attached.			
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

At 12.05 under a strain of from  
2000 to 4000 ft. varied to 570 lbs.  
Runners slightly bent in  
beam. Trawl badly torn.

No.

4250

Date

Tanner Machine. — Reel.

Turns 770 Cor. +

7

Depth 177 fms.

Shot or lead

26 lbs.

Bottom

Bottom temperature

No. of thermometer

92442. Cor.

Corrected temperature

Air

77

Surface

76

Drift

Trawl or dredge

## SOUNDING WIRE.

DOWN.

UP.

## TURNS.

## DREDGE ROPE.

DOWN.

UP.

12-44.10

50.20

0

45 =

48.50

100

45.50

2-47.25

170

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400



861° E, 9 4/10'

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

*Spending between 10th and 11th*

No. *4281* Date *23 May 02*  
 Machine: \_\_\_\_\_ Reel: \_\_\_\_\_  
 Turns \_\_\_\_\_ Cor. + \_\_\_\_\_ Depth *9 fms*  
 Shot or lead *9*  
 Bottom \_\_\_\_\_  
 Bottom temperature \_\_\_\_\_  
 No. of thermometer \_\_\_\_\_ Cor. \_\_\_\_\_  
 Corrected temperature \_\_\_\_\_  
 Air *76* Surface *75* Drift \_\_\_\_\_  
 Trawl or dredge \_\_\_\_\_

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>6:31.00</i>		0		
		100		
		200		
		300		
<i>Hy. #4281<sup>a</sup></i> <i>Hand Lead.</i> <i>air 76°</i> <i>6:55 p.</i>		400	<i>23<sup>d</sup> May,</i> <i>9 fms.</i> <i>Surf 75.</i>	
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Laysan Light, S 65° E, 1'

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Laysan Light, S 16° E, 1'			
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

4281 - 4281A - 9m -  
7-12-8-11-7-12-12-  
11-2-8-11-9.

No.

Hy. 4282. Date

23 Nov 02

Machine. Reel.

Navy.

Turns 1311 Cor. + 126

Depth 1437 fms.

Shot or lead 35 Lbs.

Bottom fine wh S. mang. Red.

Bottom temperature

73.7

(\*)

No. of thermometer

92442. Cor.

Corrected temperature

Air 75. - Surface 74. - Drift

Trawl or dredge

## SOUNDING WIRE.

DOWN.

UP.

## TURNS.

## DREDGE ROPE.

DOWN.

UP.

11.14.10	11.55.20	0
15.30	54.15	100
16.55	53.15	200
18.20	52.15	300
19.40	51.10	400
21.05	50.05	500
22.40	49.00	600
24.00	47.50	700
26.20	46.40	800
27.55	45.20	900
29.40	43.55	1000
31.20	42.30	1100
33.00	40.55	1200
34.50	39.35	1300
11.35.40	11.38.00	1366
		1400
		1500
		1600
		1700
		1800
		1900
		2000
		2100
* Thermometer		2200
		2300
		2400

apparently no  
 visible current

25° 42' N. 171° 26' W.

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

4860  
1366  
3494

260  
134  
126  
1366  
1492

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

P.L. 90.6

No. *Hy 4283* Date *May 24-02**Sigsbee* Machine. *H* Reel. *Heavy*Turns *535* Cor. + *54* Depth *589 fms*Shot or lead *60 lbs.*Bottom *gy S. max. Sp. d*Bottom temperature *38.70*No. of thermometer *92442* Cor.

Corrected temperature

Air *74* Surface *75* Drift

Trawl or dredge

## SOUNDING WIRE.

DOWN.

UP.

## TURNS.

## DREDGE ROPE.

DOWN.

UP.

<i>2.06.35</i>	<i>21.10</i>	0		
<i>35 =</i>	<i>20.05</i>	100		
<i>38.10</i>	<i>19 =</i>	200		
<i>10.10</i>	<i>17.40</i>	300		
<i>20</i>	<i>16.30</i>	400		
<i>12.20</i>	<i>15.15</i>	500		
<i>12.50</i>	<i>2.14.40</i>	<i>535</i>		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

25° 41' 30" N. 171° 15' 30" W.

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

5354  
5354  
5354

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 1284 Date May 24<sup>th</sup> 02  
 Machine. Reel.  
 Turns 459 Cor. + 46 Depth 505 fms  
 Shot or lead 60  
 Bottom crs gy S. brk sh.  
 Bottom temperature 40.5  
 No. of thermometer 72442 Cor.  
 Corrected temperature  
 Air 74 Surface 71 Drift  
 Trawl or dredge

# SOUNDING WIRE.

# DREDGE ROPE.

DOWN.

UP.

TURNS.

DOWN.

UP.

15.10.10	5.22.30	0		
11.30	5.20	100		
12.30	5.20	200		
13.30	5.20	300		
14.35	5.17.10	400		
15.10	5.16.30	459		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		



25° 41' N. 171° 04' W

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

459  
46  
505

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 285 Hy Date May 11/24  
 Machine. / Reel. M-0-1  
 Turns 179 Cor. + 18 Depth 197  
 Shot or lead 35 lb  
 Bottom fine co. S. Foraging  
 Bottom temperature 56.2  
 No. of thermometer 92442 Cor.  
 Corrected temperature  
 Air 76 Surface 75 Drift  
 Trawl or dredge

SOUNDING WIRE.

DREDGE ROPE.

DOWN.	UP.	TURNS.	DOWN.	UP.
19.40	1.24.20	0		
20.00	1.14	100		
21.30	7.22.30	179		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

25° 40' 10" N. 170° 53' 30" W.

611  
187  
K-5

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

179  
18  
19

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

P.L. = 20.2

No. 4491 Date 21 Nov 1901

Machine. Reel.

Turns 149 Cor. + 15 Depth 164

Shot or lead 60 Lbs.

Bottom fine wh S. mang S.S.

Bottom temperature 58.2

No. of thermometer 92442 Cor.

Corrected temperature

Air 76. - Surface 75. - Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
9.15.52	9.20.50	0		
15.30	19.00	100		
17.30	19.15	149		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Harv & Swasey Reefs.  
 25° 39' 40" N. 170° 43' W.

OK  
 1100  
~~1100~~

2500  
 2600  
 2700  
 2800  
 2900  
 3000  
 3100  
 3200  
 3300  
 3400  
 3500  
 3600  
 3700  
 3800  
 3900  
 4000

45  
 115  
 164  
 164

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *4487* Date *21 Mar 1902**Sigsbee* Machine. # *1* Reel. *Nav.*Turns *173* Cor. + *17* Depth *190* fms.Shot or lead *36* lbs.Bottom *wh S. brk Sh.*Bottom temperature *55. -*No. of thermometer *92442* Cor.

Corrected temperature

Air *76. -* Surface *75. -* Drift

Trawl or dredge

## SOUNDING WIRE.

## DREDGE ROPE.

DOWN.

UP.

TURNS.

DOWN.

UP.

*10.22.45* *10.27.25* 0*22.75* *25.25* 100*10.25.25* *10.25.25* *173*  
200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

25° 39' 30" N. 170° 37' W.

OK  
K. J.

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

173  
177  
190

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

P. 5. - 27.2

No. *4211*. Date *24 May 25*.  
*Sigsbee* Machine. / Reel. *Tan.*  
 Turns *220* Cor. + *22* Depth *42 fms.*  
 Shot or lead *36 Lbs.*  
 Bottom *wh. S.*

Bottom temperature *51.5*  
 No. of thermometer *92442*. Cor.  
 Corrected temperature  
 Air *76.* - Surface *75.* - Drift  
 Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>12.13.00</i>	<i>10.13.00</i>	0		
<i>51.50</i>	<i>53.50</i>	100		
<i>52.45</i>	<i>54.55</i>	200		
<i>10.15.30</i>	<i>10.15.00</i>	300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		



25° 41' 30" N 170° 37' 4" W.

OK  
fl  
24

no  
7 7 7 7  
7 7 7 7  
7 7 7 7

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 11289 Date 24 May '02.

Machine. Reel. Navy.

Turns 5 1/2 Cor. + 55 Depth 601 fms.

Shot or lead 35 lbs.

Bottom fine Wk. C. S. M.

Bottom temperature

No. of thermometer 92442. Cor.

Corrected temperature

Air 77. - Surface 75. - Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
	11. 32.25	0		
	32.25	100		
	31.25	200		
23.15		300		
24.30		400		
25.35		500		
11. 26.10	11. 27.40	600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

25° 43' 30" N. 170° 37' W.

6.00  
5.46  
5.55

546  
55  
601

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

*Hutchinson*No. *Hy 4290*. Date *24 May '02*.*Sigsbee* Machine. *Navy* Reel.Turns *973* Cor. + *95* Depth *1068 fms.*Shot or lead *60 lbs.*Bottom *fm. Wh. Co. S. M*Bottom temperature *36*No. of thermometer *92442* Cor.

Corrected temperature

Air *77* - Surface *75* - Drift~~Trawl or dredge~~

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>11:57.05</i>	<i>19 =</i>	0		
<i>58 =</i>	<i>17.50</i>	100		
<i>58.50</i>	<i>16.45</i>	200		
<i>59.45</i>	<i>15.35</i>	300		
<i>12:00.40</i>	<i>14.30</i>	400		
<i>01.35</i>	<i>13.15</i>	500		
<i>02.30</i>	<i>12 =</i>	600		
<i>03.30</i>	<i>10.50</i>	700		
<i>04.35</i>	<i>09.45</i>	800		
<i>05.35</i>	<i>08.35</i>	900		
<i>06.30</i>	<i>07.45</i>	<i>973</i>		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

25° 46' 00" N. 170° 37' W.

OK  
H. M.  
3

4860  
973  
3887

260  
165  
95  
973  
1068

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. \_\_\_\_\_ Date \_\_\_\_\_

Machine. \_\_\_\_\_ Reel. \_\_\_\_\_

Turns \_\_\_\_\_ Cor. + \_\_\_\_\_ Depth \_\_\_\_\_

Shot or lead \_\_\_\_\_

Bottom \_\_\_\_\_

Bottom temperature \_\_\_\_\_

No. of thermometer \_\_\_\_\_ Cor. \_\_\_\_\_

Corrected temperature \_\_\_\_\_

Air \_\_\_\_\_ Surface \_\_\_\_\_ Drift \_\_\_\_\_

Trawl or dredge \_\_\_\_\_

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
		0		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

$$\begin{array}{r}
 4 - 60 \\
 3 - 35 \\
 \hline
 34 - 60 \\
 60 - 35
 \end{array}$$

4292 - Sh.  
wh. co. S.